

*US Serial No. 09/669,178
Attorney Docket No. 81687RLO*

REMARKS

Claims 1, 4-9, and 21 were rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al., US 4,887,161, in view of Toyoda et al., US 4,420,773 and DiSanto et al., US 5,508,720.

Claims 1 and 21, the only independent claims remaining in the application, and are believed to clearly set forth the invention. In both claims 1 and 21 the display is actuated by the power source in the camera for displaying images and when the display is disconnected from the camera it is also disconnected from the power source. As we will see in all of the cited references, the so-called removable display has its own power source. In the present invention, the display continues to display images without the application of any power after it has been removed from the camera. Claim 21 is different from claim 1 in that the image bearing medium is removable from the display.

Watanabe et al. disclose a camera having a removable memory cartridge capable of displaying stored information and images. As the Examiner recognizes when the Watanabe et al display is disconnected from the camera power source a separate power source in the form of a photocell is needed to continue to display the image. If the secondary power source is not actuated, or there is insufficient light, then the image cannot be displayed. In Watanabe et al a portion of the surface of the memory cartridge is provided with a liquid crystal display device that displays image data and the number of frames stored in a semiconductor image memory. The display can also provide the date of the image, frame number, data indicating the place of photography, and other index information. As shown in Fig. 1, Watanabe et al. disclose a display device powered by solar battery 27. Even though the Watanabe et al. display can be removed from a camera, it is still connected to the solar battery power source. Of course when the solar power source does not receive adequate light, insufficient power is produced and no images are provided on the display. Watanabe et al do have an embodiment where the solar power supply can be turned on or off by pressing a switch. An image can only be displayed when the switch is closed and there is adequate light (col. 8, lines 15 et seq.) In the present invention, the power

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source in the camera is used to provide information or images on the display but after the display is removed from the camera no power either from the power source or any other power source is used to produce images. Clearly there is no suggestion in Watanabe et al for this arrangement as set forth in both claims 1 and 21. Moreover, there is no way that the teachings of Watanabe et al display can even be adapted to provide this function. The present invention has decided advantages over the Watanabe et al display in that it is not subject to weather conditions, is relatively simple, and easy to manufacture with reduced cost and complexity.

Toyoda et al. disclose a camera with a removable storing unit 2 with a display device 201 that displays the address of the memory used (col. 4, line 20). The image pickup unit 1 has a power supply battery E1 and the storing unit has a secondary power supply E2. When the storing unit is separated from the camera, it operates on its own battery supply E2. In all cases the display is connected to a power source. Clearly, Toyoda et al does not contemplate the use of a display that has visible images or information which can operate without a power source after the display is disconnected from the power source in the camera as required by claims 1 and 21. Toyoda et al display has the additional requirement of charging the battery in the display by a charging circuit provided in their camera (see Fig. 15b and Fig. 16). This complicated arrangement is also subject to additional problems. In contrast the present invention is relatively simple and easy to manufacture with reduced cost and complexity.

DiSanto et al disclose an electrophoretic image display (EPID) which can be written upon on a paper by an ordinary pen or pencil. As a result the written image drawn on the paper is converted to an electrical signal and reproduced as an image on the EPID. There is no disclosure in this arrangement how this type of display can be used with a camera. There is no digital memory for storing images or information in the EPID. The application of DiSanto et al is for telephone/telecommunications and not for camera captured images. Applicants fail to see how the display of DiSanto et al would even be adapted for use in the present invention. Moreover, as noted in Col. 6, lines 46-54 all of the

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EPIIDs in DiSanto et al contain a low power battery. Therefore, Applicants fail to see how the DiSanto et al arrangement can even be used in the present invention and DiSanto et al like Watanabe et al and Toyoda et al require a display with a power source. This is exactly one of the problems the present invention solves.

Reviewing, none of the cited references disclose a display capable of displaying images or information on a removable medium for storage of images or information without a power source. There is no motivation to combine the cited references because all fail to disclose the same required step. Therefore, it would be unobvious to a person skilled in the art to combine either singly or in combination, the cited references since each fail to teach an important part of the present invention, namely the ability to display images or information on a display on a removable medium for storage of images or information without a power source. Applicants believe claims 1 and 21 should be allowable because they set forth unobvious subject matter.

If there is any problem with this response, Applicants' attorney would appreciate a telephone call. In view of the foregoing, it is believed none of the references, taken singly or in combination, disclose the claimed invention. Accordingly, this application is believed to be in condition for allowance, the notice of which is respectfully requested.

Respectfully submitted,



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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.